



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,021	03/01/2002	Conrad Henkens	HENKENS=1	8793

1444 7590 02/05/2004

BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303

EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,021

Applicant(s)

HENKENS ET AL.

Examiner

John L. Goff

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6, drawn to a process for producing a multi-layer film, classified in class 156, subclass 243.
 - II. Claims 7-9, drawn to a multi-layer film, classified in class 428, subclass 458.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as by co-extrusion or extrusion molding techniques. Alternatively, the laminating agent could have been applied as a film rather than as a solution.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Art Unit: 1733

5. During a telephone conversation with Sheridan Neimark on January 10, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-6. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7-9 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 2 requires "the laminating agent comprises non-migrating trigger chemicals". It is unclear what is required by a "trigger chemical". The specification does not disclose any particular "trigger chemicals" nor does the specification disclose what is generally required by a "trigger

Art Unit: 1733

chemical” (See page 3, lines 1-4 for the only disclosure of “trigger chemicals”). Applicant is asked to clarify what is required by a “trigger chemical”. It is noted the examiner has interpreted the phrase “the laminating agent comprises non-migrating trigger chemicals” to require a resin formed of non-migrating materials such as plastic of the type used in the multi-layer co-polymerized with other chemicals (e.g. carboxylic acids the addition of which trigger a reaction with the plastic to form non-migrating adhesives).

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 1 recites the limitation “the first film” in line 5. There is insufficient antecedent basis for this limitation in the claim. It is suggested to delete “the” and insert therein - - a - -.

12. Claim 1 recites the limitation “the second film” in line 7. There is insufficient antecedent basis for this limitation in the claim. It is suggested to delete “the” and insert therein - - a - -.

13. Claim 2 requires “the laminating agent comprises non-migrating trigger chemicals”. It is unclear what applicant considers a “trigger chemical”. The specification does not disclose any particular “trigger chemicals” nor does the specification disclose what is generally required by a “trigger chemical” (See page 3, lines 1-4 for the only disclosure of “trigger chemicals”).

Applicant is asked to clarify what is required by a “trigger chemical”. The examiners interpretation of the phrase is noted above in paragraph 8.

Art Unit: 1733

14. Claim 3 recites the limitation "the carrier film" in line 2. There is insufficient antecedent basis for this limitation in the claim. The examiner has interpreted the carrier film to be the first film as suggested by the specification (Page 3, lines 6-9). It is suggested to delete "carrier" and insert therein - - first - -.

15. Claim 4 recites the limitation "the further, thermoplastic layer" in line 2. There is insufficient antecedent basis for this limitation in the claim. It is suggested to delete "the further, thermoplastic layer is composed of polyamide of polyester" and insert therein - - the further layer is thermoplastic and is composed of polyamide of polyester - -.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtsuki et al. (U.S. Patent 4,407,689).

Ohtsuki et al. disclose a process for producing a multi-layer film used in food packaging. Ohtsuki et al. teach the process comprises providing a continuous roll of aluminum foil, providing a continuous roll of thermoplastic resin film (e.g. formed of polyolefins such as ethylene, propylene, etc.), applying a solution of polyolefin adhesive dissolved or dispersed in an organic solvent (the adhesive is formed by co-polymerizing an olefinic monomer, e.g. ethylene or propylene, with one or more ethylenically unsaturated carboxylic acids) to one of the

Art Unit: 1733

aluminum foil or thermoplastic resin film, applying heat to the solution of polyolefin adhesive to vaporize the solvent, contacting the aluminum foil and thermoplastic resin film, and laminating the aluminum foil to the thermoplastic resin film through the polyolefin adhesive at a temperature of 110-160 °C and a pressure of 25-39 N/cm (Column 2, lines 60-64 and 66-68 and Column 3, lines 1-4, 27-32, and 49-54 and Column 4, lines 66-68 and Column 5, lines 1-3 and 8-18 and Column 6, lines 4-10 and 21-22 and in particular Example 4). Ohtsuki et al. further teach the surface of the aluminum foil not laminated with the thermoplastic resin film may be laminated to a thermoplastic such as polyamide or polyester to increase the mechanical strength of the foil such that the final food packaging laminate has the following structure: polyester (or polyamide) layer/aluminum foil/polyolefin adhesive layer/polyolefin film (Column 2, lines 60-64 and 66-68 and Column 3, lines 1-4).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 1733

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

20. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coran et al. (GB 2071110) and further in view of Ohtsuki et al.

Coran et al. disclose a process for producing a multi-layer film. Coran et al. teach the process comprises providing an aluminum foil, providing a polymeric film (e.g. formed of polyolefins such as ethylene, propylene, etc.), applying a solution of polyolefin adhesive dissolved in a solvent (the adhesive is formed by co-polymerizing an olefin, e.g. ethylene or propylene, with maleamic acid in the presence of a radical generator) to one of the aluminum foil or polymeric film, applying heat to the solution of polyolefin adhesive to vaporize the solvent, contacting the aluminum foil and polymeric film, and laminating the aluminum foil to the polymeric film through the polyolefin adhesive under elevated temperature and pressure (Page 1, lines 39-40, 53-54, and 58 and Page 2, lines 50-51 and 64-65 and Page 3, lines 12-13 and 17). Coran et al. are silent as to any specific uses for the multi-layer film such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the multi-layer film taught by Coran et al. in any well known and conventional manner such as in food packaging as it was well known in the art to use multi-layer films of the type taught by Coran et al. in food packaging as shown for example by Ohtsuki et al. (Ohtsuki et al. is described above in paragraph 17) as only the expected results would be achieved.

Regarding claims 3 and 4, Coran et al. are silent as to laminating an additional film to the free surface (i.e. the surface that is not laminated with the polymeric film) of the aluminum foil. However, it would have been obvious to one of ordinary skill in the art at the time the invention

Art Unit: 1733


was made to modify the free surface of the aluminum foil taught by Coran et al. to include an additional thermoplastic layer, such as polyamide or polyester, laminated thereto to provide the aluminum foil with increased mechanical strength as was well known in the art as shown for example by Ohtsuki et al.

Regarding claims 5 and 6, Coran et al. are silent as to the particular laminating conditions such as temperature and pressure. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine/optimize the laminating conditions as a function of the quality, amount, etc. of multi-layer film produced as doing so would have required nothing more than ordinary skill and routine experimentation. Further, it would have been obvious to one of ordinary skill in the art to use laminating pressure and temperatures within the claimed ranges as the materials used in Coran et al. are similar/analogous to those used in Ohtsuki et al. such that only the expected results would be achieved.


Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is (571) 272-1216. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.



John L. Goff
January 27, 2004



JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300